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## Work progresses on all three orbiters

## Satellites fly inside space station during new experiment

Shuttle Update: Foam repairs are complete on Atlantis' liquid hydrogen tank, which is located on the bottom of the external tank. The focus is currently on repairs to the liquid oxygen tank.

On **Endeavour**, technicians have completed testing the audio/visual communications systems. The shuttle main engine "eyelids," which are thermal barriers that protect the aft compartment, were installed last week. Preparations are under way for the installation of the engine-mounted heat shields.

**Discovery's** orbiter power system validation was finished last week. Technicians continue replacing thermal tile around the main landing gear door and the external tank doors with BRI tile.

♦ ISS Update: Besides preparing for the arrival of a Soyuz spacecraft, the Expedition 14 crew last week began the Synchronized Position Hold, Engage, Reorient, Experimental Satellites, or SPHERES, experiment. For the experiment, eight-inch diameter spherical satellites fly within the station cabin to test the basics of formation flight and autonomous docking that could be used in future spacecraft. The battery-powered satellites use carbon dioxide to fuel 12 thrusters as they fly in the cabin.

During a weekend "Saturday Sci-

ence" session, Flight Engineer Suni Williams conducted a SPHERES experiment run. This was the first time three satellites flew together in tests. Investigators for the Massachusetts Institute of Technology in Cambridge, Mass., deemed the experiment highly successful.

■ Marathon in Space — NASA astronaut Suni Williams will go faster than anyone has ever gone in the Boston Marathon. She will run as an official entrant in the famed race in April from 210 miles above Earth aboard the International Space Station.

Williams hopes her unique run will serve as an inspiration. She will run the race on a station treadmill, circling Earth at least twice in the process, running as fast as eight miles per hour but flying more than five miles each second. Williams, who is an accomplished marathoner, has served aboard the space station since December as a member of the Expedition 14 crew. This will be the first time an astronaut in space will be an official participant in a marathon.

And she will not be alone in her adventure. Her sister Dina Pandya and a fellow NASA astronaut, Karen Nyberg, will run the race in Boston.

Exercise is essential in NASA's efforts to counteract the effects of long-duration weightlessness on astronauts' health. For months, Williams has been training for the

marathon while aboard the station. She runs at least four times a week, two longer runs and two shorter runs. Station crews are required to exercise on the treadmill, a stationary bike and a resistive exercise machine to counter loss of bone density and muscle mass.

- Florida Tech's Master of Science in Computer Information Systems program This program has been designed and developed by industry leaders. Register now for the summer 2007 term that begins May 14. Contact Dr. Rhoda Baggs, program chairwoman and assistant professor in the CIS program, at 674-8807 or rbaggs@fit.edu. Visit http://uc.fit.edu/es/melbourne/cis/for more information.
- Weight Watchers at Work Program Weight Watchers will be starting a new series on April 12. You are invited to sit in on the April 5 meeting for free. Sessions are every Thursday at 11:30 a.m. in HQ Building/Room 2254. Stop by and ask any questions you may have about the program or contact Marilyn Clark at 504-2979.

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